

CLAIMS

1. An arrangement for installing and sealing an anode within a fluorine generating electrolytic cell, the arrangement comprising: an anode connection member, said anode connection member passing through an aperture in a skirt wall of the fluorine cell and being in electrical connection with a skirt wall closure member wherein the skirt wall closure member is sealingly engaged with said skirt wall to seal said aperture and is electrically insulated therefrom, the arrangement being characterised by a non-conductive spacer member being interposed between the closure member and the skirt wall.
- 15 2. An anode sealing arrangement according to claim 1 wherein the spacer member is made of a ceramic.
3. An anode sealing arrangement according to claim 2 wherein the ceramic is selected from the group comprising: alumina, calcium fluoride and magnesium fluoride.
- 20 4. An anode sealing arrangement according to any one preceding claim wherein the spacer is of annular form and surrounds both the aperture through which the anode connection member extends and the anode connection member itself.
- 25 5. An anode sealing arrangement according to any one preceding claim wherein the spacer member is sandwiched between two gaskets.
6. An anode sealing arrangement according to claim 5 wherein the gaskets are spiral wound gaskets.
- 30 7. An anode sealing arrangement according to claim 5 wherein the gaskets are metal bead gaskets.
8. An anode sealing arrangement according to claim 7 wherein the gaskets comprise a metal plate having a bead embossed therein.

9. An anode sealing arrangement according to claim 6 wherein the spiral wound gaskets are provided with inner and/or outer keeper rings.
10. An anode sealing arrangement according to any one preceding claim wherein the anode connection member is welded to the closure member.
11. An anode sealing arrangement according to any one preceding claim from 1 to 9 wherein the anode connection member is attached to the skirt wall closure member by mechanical fastening means, the arrangement further including an auxiliary closure member which is sealed to the skirt wall closure member by means of a further gasket which surrounds the anode connection member fastening means.
12. An anode sealing arrangement according to claim 11 wherein the gasket is a spiral wound gasket.
13. A method of sealingly installing an anode in a fluorine generating electrolytic cell, the method comprising the steps of: providing a skirt member for a fluorine generating electrolytic cell, the skirt member being of open-ended construction which, when in use, a lower extremity of said open end is immersed in an electrolyte and forms a closed volume; forming an aperture in said skirt member to permit an anode connection member to pass through; suspending said anode connection member from a skirt wall closure member and sealing said aperture with said skirt wall closure member by providing at least one non-electrically conductive spacer member therebetween.
14. A fluorine generating cell having the anode sealing arrangement of any one of preceding claims 1 to 12.
15. A fluorine generating cell having an anode sealing arrangement when made by the method of claim 13.